# THE UNIVERSITY OF HONG KONG LKS FACULTY OF MEDICINE

#### RGC Collaborative Research Fund

#### *2024-25*

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
	Collabo	orative Research Project Grant (CRPG)	
Professor R Hervas Millan	School of Biomedical Sciences	Physiological Amyloids as Physical Substrates Underlying Memory Persistence in Humans	7
Professor HL Yen	School of Public Health	The effect of pre-existing immunity on influenza infection and transmission	6.19
	Young	Collaborative Research Grant (YCRG)	
Professor KW Chan	Department of Psychiatry	Multimodality biopsychosocial evaluation and non-pharmacological interventions for cognitive function decline in patients with treatment-resistant schizophrenia-spectrum disorders	4.02

#### <u>2023-24</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
	Collabo	orative Research Project Grant (CRPG)	
Professor WCS Lau	Department of Medicine	Integrating genetic, transcriptomic, and clinical studies for SLE to achieve personalized treatment of the disease based on predisposition, early manifestation, and molecular and cellular signatures	6.48
Professor HF Tse	Department of Medicine	Programmable RNA Pseudouridylation for Premature Termination Codon Suppression as Gene Therapy for Cardiac Laminopathy	2.66
Professor ICK Wong	Department of Pharmacology and Pharmacy	Attention deficit hyperactive disorder Care in Children: Organized Research Data (ACCORD) Platform	8.17
	Collabor	ative Research Equipment Grant (CREG)	
Professor SKY Ma	School of Biomedical Sciences	Establishment of a high-speed fluorescence image-enabled cell sorter system for multidisciplinary life science research	5.5
	Young	Collaborative Research Grant (YCRG)	
Professor SF Yuan	Department of Microbiology	Development of non-nucleoside inhibitors of SARS-CoV-2 RdRp-nsp7-nsp8 replication complex	4.56

## <u>2022-23</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)	
	Collabo	orative Research Project Grant (CRPG)		
Dr H Chu	Department of Microbiology	Dissecting the pathogenesis of SARS-CoV-2 Omicron and emerging variants	6.11	
Dr CCL Wong	Department of Pathology	The immune microenvironment of recurrent hepatocellular carcinoma	7.2	
Dr JSC Ti	School of Biomedical Sciences	Integrative genome editing and protein engineering approaches to investigate the single-molecule dynamics and structures of microtubules in neuronal development and diseases	8.46	
	Collabor	ative Research Equipment Grant (CREG)		
Dr CH Yu	School of Biomedical Sciences	Establishment of light-sheet based microscopy systems for multidisciplinary biomedical research	5	
Young Collaborative Research Grant (YCRG)				
Dr ASL Wong	School of Biomedical Sciences	Development of therapeutic CRISPR-Cas enzymes for gene therapy	4.69	

## <u>2021-22</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
	Collabo	orative Research Project Grant (CRPG)	
Professor K Man	Department of Surgery	3D/4D Bioprinting liver cancer immune microenvironment for precision oncology	1.5
Second R	ound One-off CRF	Coronavirus Disease and Novel Infectious Diseases R	esearch
Dr JFW Chan	Department of Microbiology	Organoid-based investigations of COVID-19: Assess infectivity of mutant viruses, Evaluate vaccine efficacy and Explore disease pathogenesis	6.57
Dr J Zhou	Department of Microbiology	Modeling severe COVID-19 in golden Syrian hamsters	7

## <u>2020-21</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
0	ne-off CRF Corona	virus Disease and Novel Infectious Diseases Research	
Professor Z Chen	Department of Microbiology	Mechanism of immune control against COVID-19	8.63
Dr P Ip	Department of Paediatrics & Adolescent Medicine	Impact of COVID-19 pandemic on Hong Kong children and support to families during crisis	6.93
Professor ICK Wong	Department of Pharmacology & Pharmacy	A multinational big data Covid-19 Epidemiological Study on post-infection Outcomes (ACESO)	9.69
Professor PKH Tam	Department of Surgery	Comparison of paediatric and adult responses to coronavirus infection - a molecular, cellular and tissue study	5.59
Professor DY Jin	School of Biomedical Sciences	Mechanism of inflammasome activation by SARS-CoV-2	8.43
Professor BJ Cowling	School of Public Health	Superspreading of COVID19: epidemiology and control	8.98
Dr TY Lam	School of Public Health	Role of pangolins in the emergence of SARS-CoV-2 and other viruses in humans	5.79
Professor LLM Poon	School of Public Health	Replication-defective SARS-CoV-2 mutant vaccines with abnormal codon usages	6.98

## <u>2019-20</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
Professor KSE Cheah	School of Biomedical Sciences	Functional and systems analyses of regulatory networks controlling cell fate and lineage development of intervertebral disc cells	8.1
Professor ICK Wong	Department of Pharmacology and Pharmacy	International Big Data Network for Attention Deficit and / Hyperactivity Disorder: Development and Application of Data Platform	2.2

## <u>2018-19</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
Professor D Chan	School of Biomedical Sciences	Exploiting the true joint progenitor cell for articular cartilage repair	7.37
Professor X Guan	Department of Clinical Oncology	Identification and characterization of genes and microenvironment factors driving the metastasis of upper gastrointestinal tract cancers	4.42
Dr SKY Ma	School of Biomedical Sciences	Exploiting stemness as a cancer cell vulnerability using hepatocellular carcinoma (HCC) as a model system	6.99

## *2017-18*

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
Dr MSY Huen	School of Biomedical Sciences	A study of self-restraining mechanism of DNA damage surveillance and repair	6.27
Professor A Xu	Department of Medicine	Conversion of white into brown fat as a therapeutic strategy for obesity-related metabolic and vascular complications	7.44

## <u>2016-17</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
Professor PC Sham	Centre for Genomic Sciences	Establishment of Third Generation Sequencing Core Facility	3.22
Professor SCW Tang	Department of Medicine	Mechanisms of renal inflammation: role of Toll-like receptor 4	7.52
Professor GSW Tsao	School of Biomedical Sciences	Regulation and pathogenic role of latent infection of Epstein-Barr virus in nasopharyngeal carcinoma	6.32

## <u>2015-16</u>

Project Coordinator	Department/ School	Project Title	Awarded Amount (HK\$M)
Professor ML Lung	Department of Clinical Oncology	Targeted Genomics and Functional Studies of Novel Cancer Predisposing Genes for Esophageal Squamous Cell Carcinoma	7.57
Professor DY Jin	School of Biomedical Sciences	Molecular mechanism of PACT-dependent innate antiviral response	7.56

## <u>2014-15</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor GSW Tsao	Department of Anatomy / Faculty Core Facility	Establishment of a shared live cell imaging platform for super-resolution microscopy [Equipment Project]	4.00
Dr SKY Ma	Department of Anatomy	A Multidisciplinary Study on CD133 Liver Cancer Stem Cells: Molecular Mechanisms, Clinical Relevance and Therapeutic Implications	5.33
Professor XY Guan	Department of Clinical Oncology	Investigation of effects and molecular mechanisms of FGFR2-positive cancer-associate fibroblasts on tumor microenvironment in esophageal squamous cell carcinoma	3.49
Professor PL Khong	Department of Diagnostic Radiology	Micro-PET for pre-clinical molecular imaging research in Hong Kong [Equipment Project]	4.00
Professor A Xu	Department of Medicine	A Multi-disciplinary Approach to Investigate Vascular Dysfunction in Obesity and Diabetes: From Molecular Mechanism to Therapeutic Intervention	8.78

## *2013-14*

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Dr ZJ Zhou	Biochemistry	Regulation of heterochromatin remodeling in DNA repair and aging	6.9
Dr Z Chen	IN/Incrobiology	Mechanism of potentiating antigen-specific CD8+T cells	7.98

## <u>2012-13</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor KSL Lam	Medicine	To Establish a Metabolic Study Center in Hong Kong: Focusing on the Emerging Metabolic Hormones [Renewal Funding]	8.0

## <u>2011-12</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor CM Lo	Surgery	Liver Transplantation Research Centre: A Multidisciplinary Study for Liver Graft Injury (Renewal Funding)	4.3
Dr DY Jin	Biochemistry	Molecular Mechanism of Genome Instability in Viral Oncogenesis	4.3

## <u>2010-11</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Dr JD Huang	Biochemistry	Programming the Second Generation Tumor-targeting Bacteria	6.3
Dr A Xu	Medicine	A Multi-disciplinary Approach to Investigate Vascular Dysfunction in Obesity and Diabetes: From Molecular Mechanism to Therapeutic Intervention	6.3

#### <u>2009-10</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor KSL Lam	Medicine	To Establish a Metabolic Study Center in Hong Kong: Focusing on the Liver-derived Hormones	6.2
Professor IOL Ng	Pathology	Molecular Pathology of Liver Cancer - a Multidisciplinary Study	8.1
Professor HF Tse	Medicine	Pluripotent Human Stem Cell Platform for Tissue Regeneration and Drug Screening for Cardiovascular Diseases	6.7

## <u>2008-09</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor CM Lo	Surgery	Liver Transplantation Research Centre: A Multidisciplinary Study for Liver Graft Injury	5.5

# <u>2007-08</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Dr. Aimin Xu	Medicine	Vascular Dysfunction in Obesity and Diabetes: From Risk Prediction to Therapeutic Intervention	5.5
Dr Zhou Zhongjun	Biochemistry	Aging: Epigenetic regulation, cell cycle checkpoint control and stem cell potency	7.7

# <u>2006-07</u>

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor IOL Ng	Pathology	Molecular pathology of liver cancer – a multidisciplinary study	6.4

## *2005-06*

Project Coordinator	Department	Project Title	Awarded Amount (HK\$M)
Professor JSM Peiris	Microbiology	Pathogenesis, cell signaling and virus evolution of avian influenza A (H5N1)	4.6
Professor KSE Cheah	Biochemistry	Genomic approaches to uncover functionally relevant signaling pathways in craniofacial development	6.5

# <u>2004-05</u>

Nil